



Application Date: May 3, 1945.

No. 11274/45.

Complete Specification Left: May 2, 1946.

Complete Specification Accepted: Oct. 7, 1947.

## PROVISIONAL SPECIFICATION

## Improvements in or relating to Spraying Attachments for Baths

I, JAMES SCHOFIELD DUCKERING, of 37, Trent Street, Gainsborough, Lincolnshire, a British Subject, do hereby declare the nature of this invention to be as follows:—

This invention is for improvements in or relating to spraying attachments for baths. Spraying attachments are known in which the hot and cold water cocks of the bath control the temperature of the water delivered to the spraying nozzle, the delivery from which is controlled by an independent cock whereby the supply can be directed at will either to the spraying nozzle or directly into the bath without passing to the spraying nozzle. The invention has for one of its objects to provide a cheap, durable and efficient construction of spraying attachment.

According to the primary feature of the invention there is provided a spraying attachment which comprises a water conduit in the form of an upright standard carrying at its top a downwardly-facing shower nozzle and at various positions up its height horizontally-facing rotary spraying nozzles. The water conduit, which may conveniently be of aluminium alloy tubing, may be bent into oblong formation with its two longer sides upstanding. The lower end of the oblong may be located behind the hot and cold water cocks and the upper end have a branch reaching forwardly and carrying the shower nozzle. Each upright of the oblong may have two vertically-spaced rotary spraying nozzles driven by the water pressure. The connection of the lower end of the oblong includes a branch with a cock whereby water passing the hot and cold cocks may be directed either into the oblong or directly into the bath.

According to another feature of the

invention, the attachment comprises also an upstanding screen adapted to be mounted on the edge of the bath around the end where the water cocks are located and conforming to the contour of the said end of the bath and parts of the sides thereof, which screen is also connected to the said standard. Thus there may be metal clamps at the lower edge of the screen to secure it to the rim of the bath and it should be so located that water dripping from the screen will fall into the bath. Brackets may also secure the screen to the uprights of the aforesaid oblong towards the upper and lower ends thereof. The upper end of the screen may be left open so that for a bath or the like having a rounded end behind the water cocks, the screen as viewed edgewise in plan will be of channel form with a rounded base. Conveniently the screen is provided with vertically-hinged closure flaps or doors on its ends which are upstanding from the sides of the bath. The hinging axis of each flap may be intermediate of its vertical sides.

The screen, including its flaps, may be of transparent non-brittle "plastic", and all metal parts may be chromium plated. The attachment may be made as a transportable unit for fitting to any water pressure supply in households, holiday camps, sports halls and swimming pools and is not dependent upon a supply of hot water being available.

It is to be understood that the invention is not restricted to the precise constructional details set forth.

Dated this 3rd day of May, 1945.  
BOULT, WADE & TENNANT,  
111 & 112, Hatton Garden,  
London, E.C.1.  
Chartered Patent Agents.

## COMPLETE SPECIFICATION

## Improvements in or relating to Spraying Attachments for Baths

I, JAMES SCHOFIELD DUCKERING, of 16B, Cavendish Street, Keighley, Yorkshire, a British Subject, (formerly of 37,

Trent Street, Gainsborough, Lincolnshire), do hereby declare the nature of this invention and in what manner the

same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention is for improvements in  
5 or relating to spraying attachment and screens for baths.

Spraying attachments are known in which the hot and cold water supplies of the bath can be delivered to the spraying  
10 nozzle in controlled proportions so as to obtain a chosen temperature for the spraying nozzle delivery, which latter is controlled by a cock, and in which the said water supplies can be directed at will  
15 either to the spraying nozzle or directly into the bath without passing to the spraying nozzle.

Spraying attachments and screens are also known comprising a water conduit in the form of an upright standard of oblong  
20 formation located adjacent to the water supplies and carrying at its top a downwardly-facing shower nozzle reaching over the bath and at various positions up its  
25 height horizontally-facing spraying nozzles, means whereby the water may be passed either into the standard or directly into the bath, and an upstanding screen of metal or glass adapted to be mounted  
30 on the edge of the bath around the end where the water supplies are located and conforming to the contour of the said end of the bath and parts of the sides thereof, which screen is connected to said standard.

The invention has for one of its objects to provide a cheap, durable and efficient construction of spraying attachment and screen.

According to the primary feature of the  
40 invention there is provided a spraying attachment and screen for baths, comprising a water conduit bent into oblong formation mounted with its two longer sides upstanding and its lower end behind  
45 and connected to the water supplies at one end of the bath and having a branch reaching forwardly over the bath from its upper end and carrying a shower nozzle and also having vertically-spaced rotary  
50 spraying nozzles in the uprights of the oblong and driven by the water pressure, means whereby the water may be passed either into the oblong or directly into the bath, and an upstanding screen of transparent non-brittle "plastic" material  
55 mounted on the edge of the bath around the end where the water supplies are located and conforming to the contour of the said end of the bath and parts of the sides thereof and secured by brackets to the uprights of the said oblong. Conveniently the screen is provided with vertically-hinged closure flaps or doors on its ends which are upstanding from the  
60 sides of the bath.

For a more complete understanding of the invention, there will now be described, by way of example only and with reference to the accompanying drawings, one construction of attachment according to the invention. It is to be understood, however, that the invention is not restricted to the precise constructional details set forth.

In these drawings:—

Figure 1 is a perspective view showing the attachment in place on a bath, and Figure 2 is a sectional plan view on a scale larger than that of Figure 1.

Like reference numerals indicate like parts throughout the drawings.

A portion of a household bath is shown at 10, it having a rim 11 around its upper edge. Hot and cold water supply conduits are shown at 12 and 13 and individual control cocks therefor at 14 and 15. Connections 16 and 17 lead from the conduits 12 and 13 to a mixing casing 18, the latter also having a connection 19 extending upwardly therefrom. The connections 16, 17 and 19 are controlled by a cock (not shown) in the interior of the casing 18, and the setting of this cock is determined by an operating handle 20. By suitably setting the handle 20, if desired against markings on the casing 18, the proportions of hot and cold water admitted to the casing can be selected, and the supply to the connection 19 can be discontinued when desired.

The connection 19 leads to a water conduit, which may conveniently be of chromium-plated copper tubing bent into oblong formation with its two longer sides 21 and 22 upstanding. The lower end 23 of the oblong is located behind the hot and cold water cocks 14 and 15 and the upper end 24 has a branch 25 reaching forwardly and carrying a shower nozzle 26 controlled by a cock 27. Each upright of the oblong is shown as having two vertically-spaced horizontally-directed spraying nozzles 28 which are rotary and driven by the water pressure. Thus it will be appreciated that by suitable manipulation of the cocks 14 and 15 and the handle 20, water may either be sprayed from the nozzles 26 and 28 or fed directly into the bath through the cocks 14 and 15.

Upstanding from the rim 11 of the bath is a screen comprising two main sheets 29 and 30 of transparent non-brittle "plastic" material which are received at their lower ends in a channel member 31, of a contour conforming to the end portion of the bath, and carrying clips 32 to secure it to the rim 11. The rear ends of the sheets 29 and 30 are shown as overlapping but they can be arranged to abut.

If the sheets are made a standard size, the amount of overlap may depend upon the dimensions of the bath. The upper ends of the sheets are received in another channel member 33, the ends of which are braced by a tie or strut 34. The channel member 31 should be so located that water dripping from the screen will fall into the bath. Brackets 35 secure the screen to the uprights 21 and 22 of the aforesaid oblong towards the upper and lower ends thereof. The screw-threaded ends 36 of the brackets reach through elongated slots 37 in the screen (see particularly Figure 2) to receive securing nuts 38, and closure strips 39 are carried by the brackets to cover such parts of the slots 37 as would otherwise be exposed. These slots permit relative adjustment of the two sheets 29 and 30. The upper end of the screen is left open so that the screen as viewed edgewise in plan is of channel form with the rounded base.

The screen also includes closure flaps or doors 40 and 41 hinged at 42 to the upstanding edges of the sheets 29 and 30. The screen, including its flap, is of transparent non-brittle "plastic", and all metal parts may be chromium plated.

The attachment may be made as a transportable unit for fitting to any pressure water supply in households, holiday camps, sports halls and swimming pools and may, of course, be used even though a supply of hot water is not available.

It is to be understood that the invention is not restricted to the precise constructional details set forth.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A spraying attachment and screen for baths, comprising a water conduit bent into oblong formation mounted with its two longer sides upstanding and its lower end behind and connected to the water supplies at one end of the bath and having a branch reaching forwardly over the bath

from its upper end and carrying a shower nozzle and also having vertically-spaced rotary spraying nozzles in the uprights of the oblong and driven by the water pressure, means whereby the water may be passed either into the oblong or directly into the bath, and an upstanding screen of transparent non-brittle "plastic" material mounted on the edge of the bath around the end where the water supplies are located and conforming to the contour of the said end of the bath and parts of the sides thereof and secured by brackets to the uprights of the said oblong.

2. A construction according to Claim 1, in which the screen is provided with vertically-hinged closure flaps on its ends which are upstanding from the sides of the bath.

3. A construction according to Claim 1, in which the lower end of the screen is received in a channel member conforming to the end portion of the bath and carrying clips to secure it to the rim of the bath.

4. A construction according to Claim 3, in which the upper end of the screen is received in a channel member, the ends of which are braced by a tie or strut.

5. A construction according to Claim 1, in which the screen comprises two main sheets which abut or overlap at their adjacent edges according to the dimensions of the bath and are slotted to accommodate adjustment relatively to their securing brackets.

6. A construction according to Claim 5, in which closure strips are carried by the brackets to cover such parts of the slots as would otherwise be exposed.

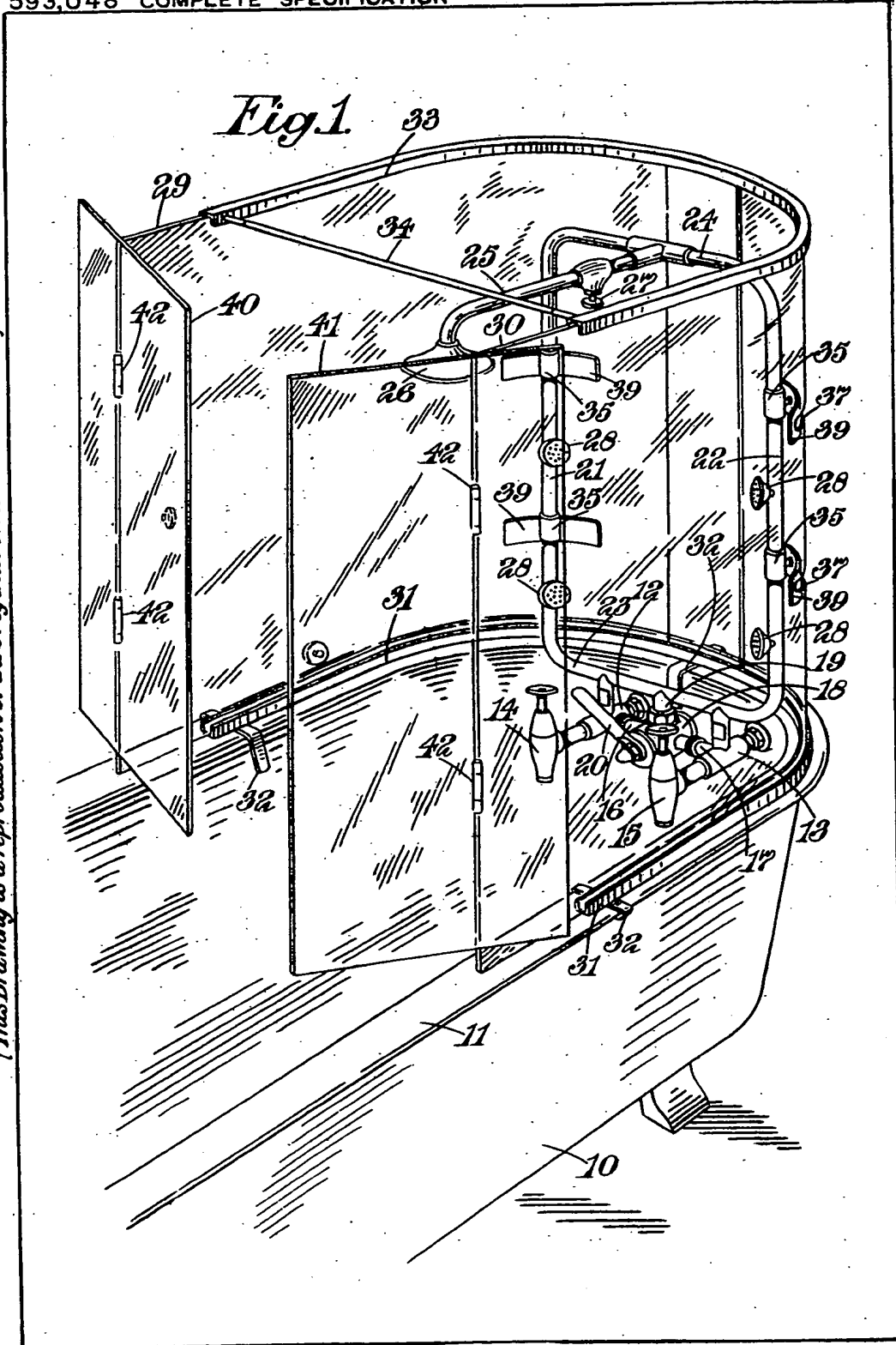
7. In a spraying attachment and screen according to the preceding claims, the combination and arrangement of parts substantially as described with reference to the accompanying drawings.

Dated this 2nd day of May, 1946.

BOULT, WADE & TENNANT,  
111 & 112, Hatton Garden,  
London, E.C.1.

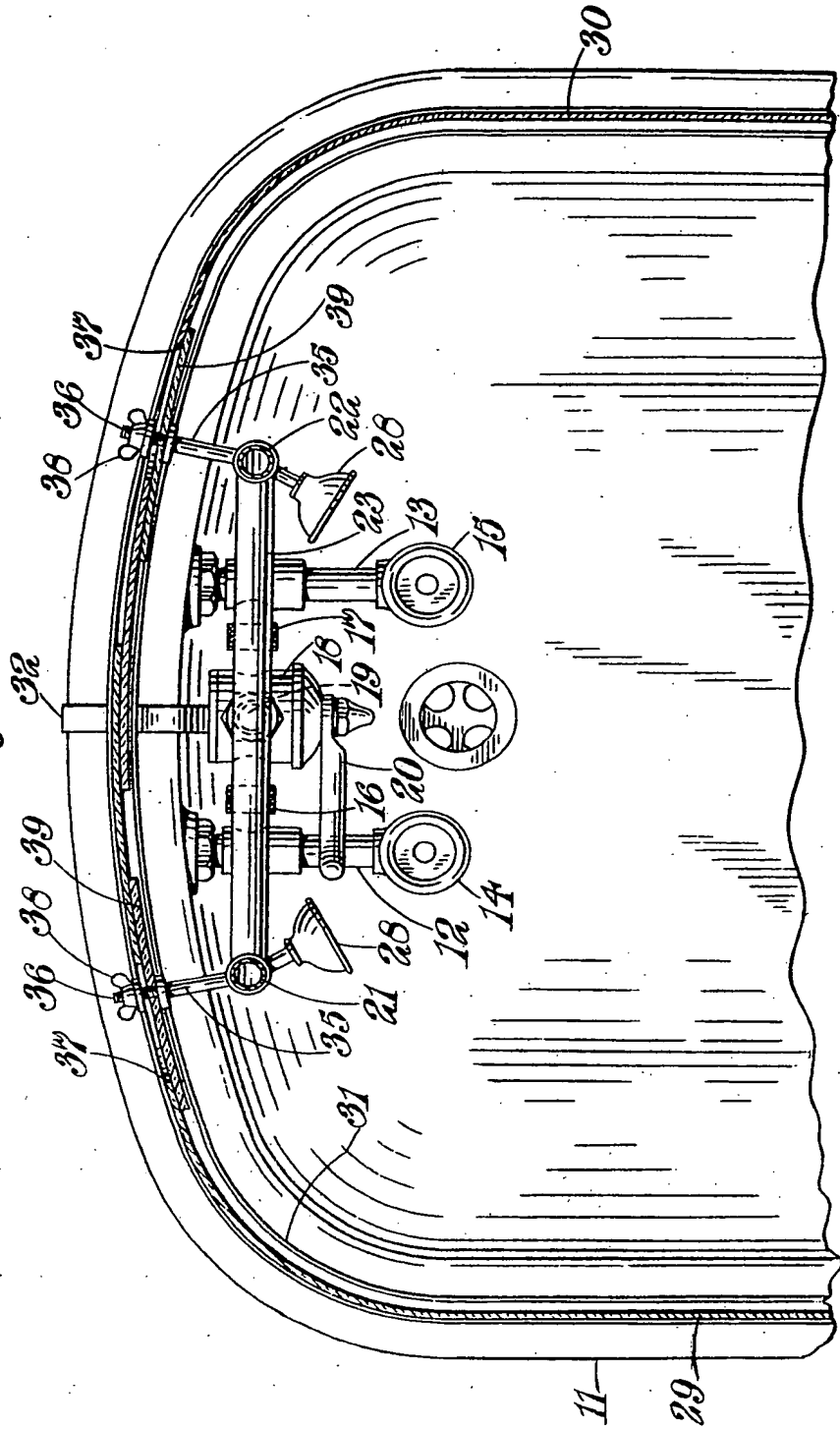
Chartered Patent Agents.

[This Drawing is a reproduction of the Original on a reduced scale.]

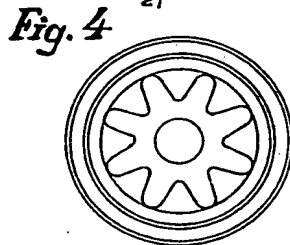
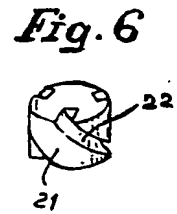
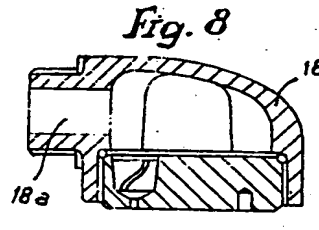
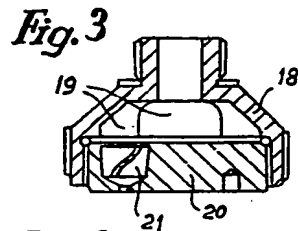
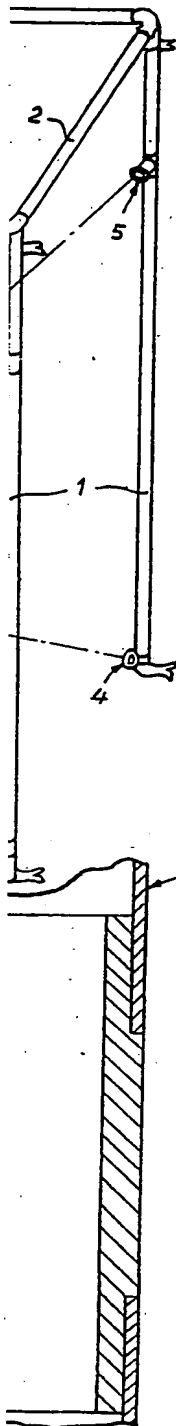


[This Drawing is a reproduction of the Original on a reduced scale.]

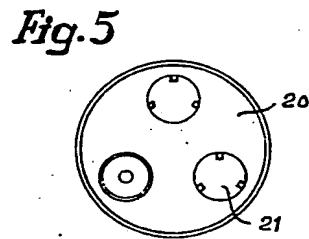
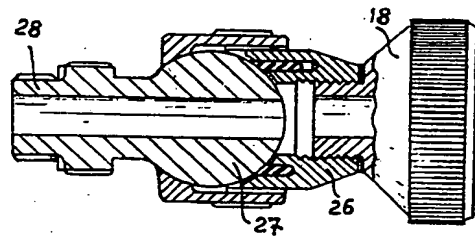
Fig. 2.



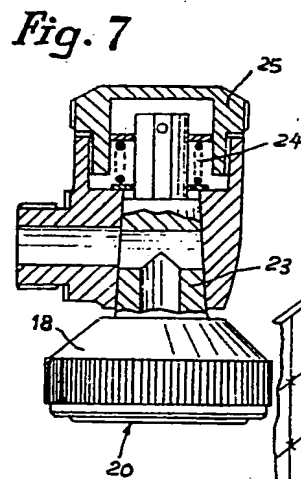
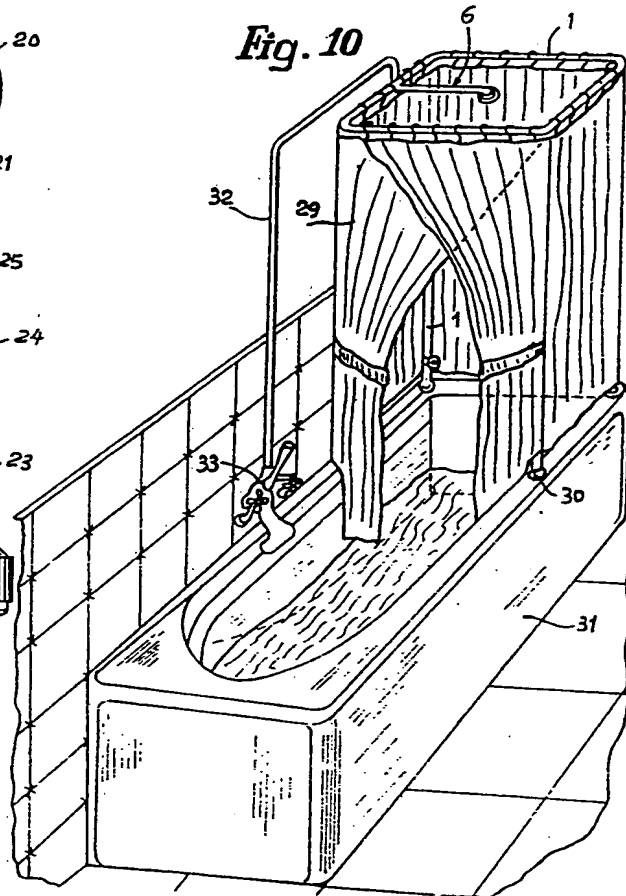
**This Page Blank (uspto)**



**Fig. 9**



**Fig. 10**



**This Page Blank (uspto)**